The Washington Post

HEALTH&SCIENCE

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TUESDAY, APRIL 17, 2012 K EZ

URBAN JUNGLE

There's something in the air And in your gutters, and drifting across your patio. It's the male white oak catkin. **E6**

9 cliches about exercise are questioned: Should you prefer sports drinks to water? Can you trust the calorie counters on gym machines? **Consumer Reports Insights, E3**

INSURING YOUR HEALTH

Network issues
Two recent developments help consumers who get health care outside their plan's network. Read the column online at *washingtonpost.com/health.*

The end of time: Accompanying a close friend through the last months of life. **E6**

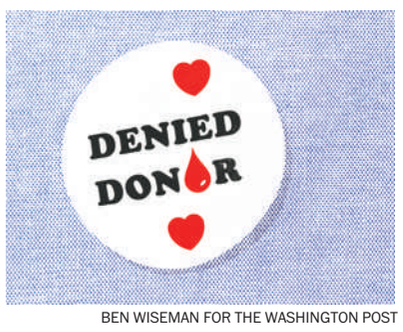
If food is in plastic, what's in the food?

BY SUSAN FREINKEL
Food & Environment Reporting Network

In a study published last year in the journal Environmental Health Perspectives, researchers put five San Francisco families on a three-day diet of food that hadn't been in contact with plastic. When they compared urine samples before and after the diet, the scientists were stunned to see what a difference a few days could make: The participants' levels of bisphenol A (BPA), which is used to harden polycarbonate plastic, plunged — by two-thirds, on average — while those of the phthalate DEHP, which imparts flexibility to plastics, dropped by more than half.

The findings seemed to confirm what many experts suspected: Plastic food packaging is a major source of these potentially harmful chemicals, which most Americans harbor in their bodies. Other studies have shown phthalates (pronounced THAL-ates) passing into food from processing equipment and food-prep gloves, gaskets and seals on non-plastic containers, inks used on labels —

PLASTIC CONTINUED ON E4



BEN WISEMAN FOR THE WASHINGTON POST

FDA still says gay men can't donate blood

BY LAURA UNGAR
Special to The Washington Post

Raymond Robbins was ready to roll up his sleeve and give blood for the first time when a question asked of potential donors stopped him cold:

"From 1977 to the present, have you had sexual contact with another male, even once?"

"I answered yes, but I was caught off guard by the question," said Robbins, 28, of Washington.

His answer got him turned away, stopped by a longstanding Food and Drug Administration policy that bans sexually active gay men from ever donating blood. The federal ban, now three decades old, has come under increasing scrutiny in recent years as HIV detection tests and procedures for screening donated blood have improved greatly and blood shortages

BAN CONTINUED ON E6

"I suspect there are incredible collections of things just sitting and waiting for people to take them one step further."

Edward L. Kaplan, an infectious-diseases researcher at the University of Minnesota Medical School

Unburied treasure

Tissue from long-dead bodies reveals secrets of AIDS, influenza and more

PHOTOS BY LINDA DAVIDSON/THE WASHINGTON POST

Army Col. Thomas Baker pulls tissue samples stored at the Joint Pathology Center, where he is the interim director. Top, the Silver Spring site's collection includes samples from deaths that occurred in the 1917-18 flu pandemic.

BY DAVID BROWN

Pirates used to say that "dead men tell no tales." Of course, the buccaneers had never heard of the polymerase chain reaction. Dead men turn out to be loaded with information if you can get your hands on them — or better yet, on small preserved pieces.

The genomics revolution, two decades old, has given biological researchers an astonishing array of tools, both physical and computational, to extract information from once-living tissue. Perhaps the most spectacular example was the discovery of enough remnant DNA in Neanderthal bones to allow scientists to conclude that those extinct hominids once interbred with modern humans.

But it turns out there is a lot of less exotic — and potentially more useful — research to be done on preserved tissue whose age is measured in decades, not millennia.

The best-known examples are the reconstruction of the infamous 1918 Spanish influenza virus from preserved lung tissue, and the discovery of the AIDS virus in blood serum from 1959 and a tissue sample from 1960. Several years ago, scientists used serum collected from airmen during the Korean War to understand the course of hepatitis C infection, a disease unknown at the time the samples were drawn.

This work is likely to increase, for a couple of reasons. Scientists have steadily refined the laboratory technique called polymerase chain reaction (PCR) to catch pieces of DNA swimming in oceans of molecular contamination. Simultaneously, the discovery of new microbes, hormones and biomarkers has given researchers more things to fish for.

The information gained will shed light on why diseases — caused by microbes, environmental exposures and lifestyle changes — emerged when they did. It will reveal how their prevalence has changed over time. It might even help scientists predict future disease trends or outbreaks.

Curiously, nobody has a good idea of how much potentially useful biological material is stored away in universities, hospitals, research institutes, museums and private labs. Even the known collections are largely uninventoried and unpublicized.

"I suspect there are incredible collections of things just sitting and waiting for people to take them one step further," said Edward L. Kap-

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